

5300, MSD Decatur Township

PROJECT ABSTRACT

MSD of Decatur Township is eligible for grant funds and Rochester Community Schools is our partner. The total project seeks \$353,120 in funding with \$230,758 for Decatur, \$115,300 for Rochester Schools and \$7,062 remaining for external evaluation services.

The major focus of this grant is to provide professional development opportunities to help teachers enhance their classroom instruction in the core subject areas of language arts, mathematics and science through project-based learning (PBL) and technology integration strategies. Our goal is to integrate technology through increased use of classroom projectors, interactive student response systems and systemic professional development that helps teachers modify present classroom strategies and thinking to differentiate instruction that accommodates the needs of all students. The Partnership for 21st Century Skills Project emphasizes that "students need to understand how to apply math and science knowledge to different situations and challenges. Hands-on, project-based math and science curriculum activities provide opportunities for students to think critically about the use of math and science in solving problems, deepening their knowledge of the basics." Therefore, another key component is the inclusion of 21st Century skills and Web 2.0 tools for student use and an increased emphasis on creating project-based learning environments.

This will be accomplished through monthly distance learning sessions that will primarily concentrate on migrating project-based learning into grades K-8 and will utilize resources from the respective New Tech High School Models at each district. Recent upgrades to distance learning equipment at Decatur Central High School will allow both districts to share training and support, gain multiple perspectives from two demographically different districts, and use those experiences to generate examples and guidelines that can then be shared with other state and national schools. Both Decatur Township and Rochester Schools are New Tech model demonstration sites that utilize both STEM and Project Lead the Way curricular emphases.

During the course of the project, further collaboration between districts will incorporate use of wikis, websites, and Rochester Schools' Ning location as a collaborative social networking space for teachers participating from both districts. We will create grade level/subject groups along with a book study area for teacher interaction and sharing between distance learning sessions.

Student achievement will be monitored through multiple sessions of reading/writing assessments at the HS level and through NWEA in grades 1-12 and ISTEP+ testing at grades 3-12.

MSD Decatur is presently making changes to their K-6 grade level structure. Our New Tech School of Ideas and Decatur Middle School are already involved with and incorporating PBL. This grant will serve as a catalyst to support professional development for teachers in the new structure which emphasizes the use of project-based learning.

NEEDS/BASELINE

Decatur Township is located in the southwest region of Indianapolis, IN. The district presently enrolls 6,397 students in grades K-12 and has 350 instructional staff. In 2008, 58% of the households in Decatur Township had a median income of less than \$30,000.

In 2009-2010, the district will be in its 3rd year of focused district improvement. District student achievement is characterized in eight (8) ways identifying a district-wide failure to achieve individual school and student AYP in critical content areas.

- 1) Lynwood and Stephen Decatur Elementary Schools are school-wide Title I schools currently in school choice as defined by AYP sanctions
- 2) 18% of Decatur students are enrolled in special education programs compared to a state average of 17%
- 3) Free/Reduced lunch, Special Education, and English/Language Arts subgroups as Elementary groups did not achieve Annual Yearly Progress (AYP)
- 4) African American subgroup did not achieve Math AYP in any of the district elementary schools
- 5) At Decatur Middle School (DMS), the African American, Hispanic, White, Free/Reduced lunch, and special Education subgroups failed to achieve AYP in English/Language Arts
- 6) The DMS Black subgroup did not achieve AYP in math
- 7) The Decatur High School Free/Reduced lunch subgroup did not achieve AYP in English/Language Arts
- 8) The Decatur High School, Free/Reduced lunch, Special Education, and attendance subgroups did not achieve AYP

For the Decatur Central High School (DCHS) class of 2009, 164 students, 52% of the graduating class, took the SAT. Although the average scores for DCHS have declined recently, the more students that take the SAT, the more likely they will enter post-secondary education. Eight years ago, DCHS only offered one Advanced Placement class. In 2008-2009, the number of classes has increased to 12 and continues to grow.

MSD of Decatur Township has implemented the technology-based FastForward program to assist secondary students who struggle in reading.

155 students increased their reading level by 1/2 year in the first semester;

40 students increased by 1 year in one semester,

39 students increased their reading level by 1 1/2 years in a semester; and

54 students increased by 1 1/2 years in a semester.

Compass Learning/Odyssey Instructional Software has been in use for 4 years at grades 1-8 and has just begun to be implemented in the high school to assist students in credit recovery and as a classroom integrated instruction tool.

Rubicon-Atlas Curriculum Software is used by Decatur Township to support quality instruction that meets IN Academic State Standards for all students. A district-wide plan for consistent and effective integration of this solution needs to be continuously adapted for the changing needs of the 21st Century classroom.

SchoolFusion and Harmony Web Software products have been adopted as the Decatur and Rochester website solutions, respectively. Currently, less than 40% of district faculty use these valuable tools as a resource for communication with students and their parents.

Through grant funds, Decatur was recently able to acquire a full time technology coach to support existing software, model technology integration and support technology-based lesson design. Fewer than 50% of the district's faculty integrate technology to improve instruction and learning. Less than 50 large screen projectors service over 195 classrooms at the K-8 grade levels. Less than 40% of the district's faculty apply webpages as a resource for communication with students and parents. A plan to support consistent and effective integration of this solution is being developed. New Tech School of Ideas, a small learning community at Decatur Central High School, is implementing a one-to-one curriculum offering for its over 300 students.

GOALS/OBJECTIVES

Goal #1 - Increase student language arts and math achievement by 2% or above in grades 3-12 in each subgroup annually

1.1 - Increase student-centered and learner-focused instructional design and educational experiences utilizing project-based learning

1.2 - Increase student access to digital content including web-based curriculum and online educational resources

1.3 - Increase technology supported collaboration and communication between teachers, parents, students, and community members to improve teaching and learning

1.4 - Increase focus on math, reading, and science instruction using present and newly acquired instructional learning software (i.e., Odyssey, FastForward, ALEKS)

Goal #2 - Develop instructional design guidelines and strategies based on the needs of the 21st Century learning environment

2.1 - Integrate classroom technologies including, but not limited to large screen projectors, remote student response systems and wireless tablets

2.2 - Increase student access to available classroom technologies supporting more engaged learning environments that emphasize project-based learning, 21st Century strategies and Web 2.0 tools

2.3 - Use video-conferencing technology between MSD Decatur Township staff and Rochester Community School staff to collaborate on professional development and the development of best practices for classroom instruction

Goal #3 - Provide embedded faculty professional development to improve student learning

3.1 - Provide faculty with innovative models for instructional design and technology integration

3.2 - Provide faculty with continuous, on-site professional development that supports present technologies and innovative 21st Century classroom tools through a project-based learning focus

Goal #4 - Contribute to and share with other educational institutions to assist in building a state-wide culture of academic excellence and leadership

4.1 - Extend model site status to our K-8 learning communities for technology supported instructional design, parental engagement and student learning

4.2 - Participate and share in state, regional and national professional meetings that feature and promote technology integration and project-based learning

4.3 - Develop collaboration strategies that can be shared with other Indiana schools

METHODS/ACTIVITIES

Timeline I - January 2010 - May 2010

- Use an application interest format that teachers complete to share their interest in participating in the project each session

- Project-Based Learning Training: (See detailed description in professional development)

2 days in January 2010, 1/2 day in March, 1/2 day in April

2 days in August 2010, 1/2 day in October, 1/2 day in November

2 days in January 2011, 1/2 day in March, 1/2 day in April

- Books and resource materials for each cadre will be purchased by Decatur Township and Rochester Schools for their participating staff members

- Access to NING site - Supplied to all participating teachers in both districts by Rochester Community Schools

- A book study group within the NING site provided by Rochester Schools will be used to establish a Professional Learning Network as we read the texts provided as part of the professional development resources

- Distance Learning (Video Conferencing) Sessions - Occur once each month with a final reflection session at the close of each round of the project

- Use of SchoolFusion (includes wiki format) - Site location created in SchoolFusion (Decatur Township) and shared with Rochester teachers in the project

- Hardware training for teachers to practice effective strategies for using wireless chalkboard systems and interactive response systems to support increased student involvement with digital content, immediate feedback and guide more effective use of classroom time.

- Data collection and analysis resources made available to teachers

- Professional Development for Odyssey provided for all teachers in Decatur Township (25 days spread over January 2010 - May 2011)

- Generate a small group of 5 participants from this training session to serve as in-district training cadre members who will be responsible for continuing the training after the grant period has completed.

Timeline II - August 2010 - December 2010 - Refine and repeat events from Timeline I

Timeline III - January 2010 - June 2010 - Refine and repeat events from Timeline II

PROFESSIONAL DEVELOPMENT

Professional Development will occur in semester blocks occurring in:

January 2010 - May 2010, August 2010 - December 2010, and January 2011 - May 2011.

---Applicant Interest Form will include questions similar to;

- What are the essential questions and outcomes that will be enhanced by this training?
- How do you think this training will be used to engage your students?
- How will you help your students reflect on their learning and assess their projects?
- Will you be willing to share your project(s) and student artifacts with others and share your expertise?

---Project-Based Learning Training (Tentative Outline for sessions)

Days 1 & 2 will focus on an Introduction to PBL along with time for teachers to generate initial ideas and expand them.

- Day 1 - Whether you are investigating the project-based learning model for possible implementation in your classroom or school or are preparing students who will attend a middle school or high school with a PBL focus, this informative session is right for you. During this session we will explore the basic attributes of PBL including; What PBL is and what it is not, various implementation models, the features of a PBL unit vs. doing a "project", and the role of the teacher in a PBL classroom. Participants will also have access to a variety of sample project templates to explore.

- Day 2 - If you are familiar with the basic tenets of PBL and are interested in the "nuts and bolts", this session is for you. During this session we will explore essential elements of project planning and management. We will also investigate project criteria including academic rigor, relevance, authenticity, inclusion of academic standards, and student engagement. Participants will have access to a variety of sample project templates to explore.

Strategies and methods used during the training include:

- One-on-one/Small group workshops to craft driving questions, create entry documents/hooks, evaluate integration of standards, relevance and rigor, establish scaffolding activities, and finally evaluate assessment opportunities.
- Collaboration and protocol workshops for staff and students
- Model lessons with students
- Provide resources for PBL projects already created and assist teachers in adapting them to fit their needs
- Technology workshops (Web 2.0 tools as well as current technology)

-Technology audit (both for equipment and its current use and potential use or application)

-Classroom coaching (one-on-one) based on teacher needs/requests

---Monthly distance learning meetings between MSD Decatur and Rochester to collaborate on lesson development and implementation

---NING Social Networking site will be hosted by Rochester Community Schools and serve as a strong collaboration tool for participants from both districts

---Data consultation resources will be made available to teachers for NWEA, ISTEP+ and school based assessments as teachers learn to use student test data accurately to guide and differentiate student instruction as evidence of response to intervention strategies

---Odyssey professional development will focus on more efficient use of the instructional tool along with its reporting functions and connections to use as a tool for intervention when appropriate

---Continue use of Technology Coach to help connect present training sessions with the newly developing projects that come out of the training

---Technology hardware training will be incorporated into PBL training but also given as needed at both district locations

---A small cadre from each training group will continue serving as resource persons and prospective trainers for ongoing district training

Example Text Resources for Participants:

Using Technology with Classroom Instruction That Works, by Howard Pitler

Reinventing Project-Based Learning: A Field Guide to Real-World Projects in the Digital Age, by Suzie Boss

Web 2.0, New Tools, New Schools, by Gwen Solomon

FORMATIVE/SUMMATIVE EVALUATION

Formative:

- Instructional coaches, building administrators, and the district technology coach will monitor teachers participating in the project and support their work in direct (allowing additional time as available for collaboration and distance learning meeting sessions) and indirect ways (encouraging participants to share experiences with their colleagues)
- Participants will determine a minimum number of posts/entries to the NING site and/or use of website pages. These postings will then be monitored weekly by project overseers such as technology directors, technology coaches, instructional coaches, and PBL consultants as needed
- Project-Based Learning consultants will perform classroom visitations and/or assist participants through online communication and resources based on jointly developed criteria/rubrics
- Surveys of teacher learning, questions, ideas and reflective responses to prompts throughout the project will be collected following monthly distance learning sessions to be used for further refinement of training during the course of the project.

Summative:

- NWEA/ISTEP+ scores will be used to assess beginning and ending student achievement results during the time the teacher is participating in the project.
- Surveys of teacher learning before and after the project to measure progress regarding use of PBL strategies and integration of technology

- Participant lessons will be evaluated based on a rubric/criteria that project participants develop. Lessons meeting the criteria will be compiled and available via website locations for both districts and other districts as further examples of PBL lessons. Lessons not meeting the criteria will be refined to meet criteria, then posted to the web location.

- A small group of teachers from each participant group will be invited to form a PBL training cadre to support ongoing training for each district with follow-up workshops in their respective buildings.

LOCAL MATCH

\$547,642

MSD Decatur Township has five (5) current corporate partnerships connected to this project providing the district with substantial software capacity. The district core software capacity investment to date totals \$547, 642.

1. Compass Learning/Odyssey - www.compasslearning.com [\$296,000 K-8; \$90,000 HS] This software was purchased to provide supplementary instructional support at all grade levels. Compass Learning will provide professional development support to train staff members throughout the project.

2. SchoolFusion - www.schoolfusion.com [\$12,340] This software is for all staff members within the district. SchoolFusion hosts the webpages created and updated by staff members and provides support as needed.

3. Rubicon-Atlas - www.rubiconatlas.org [\$16,000] This software is available to all staff members for online communication of grade level and district curriculum. Rubicon hosts this web-based service and provides support as needed.

4. FastForward - www.scilearn.com [\$120,000] This program is designed to strengthen brain efficiency for increased learning and reading success. This software is being used at the middle and high school levels to assist struggling students.

5. Atomic Learning - www.atomiclearning.com [\$13,302] This program was recently purchased to assist staff, students and parents with self-training resource tutorials to add a "just in time" learning resource.

PARTNERSHIPS

The Rochester Community School Corporation serves the rural townships of Fulton County in northern Indiana. Rochester is the county seat and the largest city in the county seat and the largest city in the county with a population of 6,451. The per capita personal income in 2004 was \$25,883 with a 10.2% poverty rate according to the Census Bureau. Rochester Schools have 4% multi-racial, 1% asian, and 1% Hispanic subgroups. The 2000 census chart below shows the educational attainment of Fulton County residents.

Education Level

-less than a high school diploma	32%	19.8%
-high school diploma/equivalent	42%	49.2%
-some college credit, but no degree	22%	16%
-bachelor degree or higher	4%	10.2%

The January 2007 Annual Report, based on 2007-08 data indicates Rochester Schools have reduced the percentage of special education students served from 13.3% in 2005-06 to 12.4% compared to the state average of 17.9%. Students on free and reduced lunch increased from 28% in 2001-02 to 45% in 2007-08. Unemployment as of July 2009 is at an unprecedented 13.4%.

Student achievement in Rochester Community Schools is characterized in six(6) ways:

- 1) Columbia and Riddle Elementary Elementary schools are targeted Title I schools,
- 2) Currently, 12.4% of Rochester students are enrolled in special education programs compared to a state average of 17%,
- 3) Special Education subgroups as an elementary subgroup did not achieve AYP,
- 4) At Rochester Middle School, the Special Education subgroups failed to achieve AYP in English/Language Arts,

5) The Rochester High School Special Education subgroup did not achieve AYP in English/Language Arts, and

6) The graduation rate has increased from a low in 2006 of 79.9% to 81.8% in 2008.

A major focus of RCSC is for all students to have opportunities for post-secondary education while still in high school. The vision is to provide the opportunity for all students to leave high school with 12 hours of college credit. To date, 8 students earned university credit this past year through the Ball State Independent Studies Program offered on-line. Additionally, 71 students participated in the Advanced College Project through Indiana University. At this point Advanced Placement opportunities are limited but include Government and Calculus. In 2007-08 Rochester had 6 students score 3 or above on AP exams.

RCSC implemented Read 180 in 2006 and will expand that program to include Expert 21 for secondary student who struggle in reading and System 44 for upper elementary students. 71% of the students ended the 2008-09 school year in the proficient or advanced columns while 81.3% of the middle school students met the goal.

Rochester has a locally developed math assessment for grades K-8. However the assessment is not reliable or valid. Additionally, the high school does not have a formative or summative math assessment. There is a need for an aligned math assessment throughout the grades and a means for reliable comparisons. Rochester Schools have recently contracted with Indiana University to assist in looking at our local assessments and how we can modify or replace them to ones that better suit our needs.